# User Interface Design
## & Development

Fall 2012
Course Projects

João Pedro Sousa
SWE 632
George Mason University

## three projects

A. Android: wilderness trip
B. Android: party in Pamplona
C. desktop: movie rating

go though one iteration of
the usability lifecycle

## A. wilderness trip

- you're exploring a wilderness with a group of friends
- each friend walks separately, carrying a phone
- to share with friends, your phone collects:
  - your location
  - what you see
    - snake - at your location
    - bear - where it is and which direction it's moving
  - what you hear
    - wolves - which direction the howling comes from
- your phone shows you:
  - where your friends are now
  - what you and your friends saw & heard
    - up to now - last few minutes
    - at any point since the start of the hike – history

## B. party in Pamplona

- you're out with a group of friends
  http://www.youtube.com/watch?v=7EnXmnPgK8w
- each friend walks separately, carrying a phone
- to share with friends & 911, your phone collects:
  - your location
  - what you see
    - happening bar - at your location
    - bull – which direction they're moving on your street and how fast
    - injured tourist - at your location
- your phone shows you:
  - where your friends are now
  - what you and your friends saw – bars and injured: history, as in A.
  - which direction to run - if and when there is a nearby bull coming fast at you

## C. movie rating

- develop your own rating system, e.g.
  - good/not good - http://www.rottentomatoes.com/
  - a numeric scale - http://www.imdb.com/
  - multiple criteria…
- users enter info & rating about the movies they see
- users may find movies by any combination of
  - rating, genre, language, action location, etc.
- you may use any platform, language, storage, etc. of your choice
  - you are responsible to set up and run all demos in class
- groups of 2

## projects A&B
## explore alternative modalities

- input
  - touch widgets on screen
  - accelerometers, gyroscope, compass, …
    https://market.android.com/details?id=com.infraredpixel.drop&hl=en
    f.r.u.i.t
- output
  - graphic
    - widgets, text, lists
    - map
    - augmented reality
      http://techsplurge.com/3214/mega-list-33-awesome-augmented-reality-apps-games-android/
  - audio, vibration…

projects B & C
## simulation

- in a real system, events would be received via network
  - friend moves
  - friend enters observation
- run the event simulator as a service
  - either read timestamped events from file or generate randomly
  - upon event occurrence issue an intent/callback
- your project code
  - registers to receive event intents/callbacks
  - if using callback, the implementation of the callback method puts the event in a queue for processing and promptly returns

course TA can help with this

## next steps

- Prj 1: form group 2~3 people
  - register group in blackboard by Feb 13 at the latest
    - indicate which project
- Prj2: user and task models
  - survey session on Feb 20
  - report due on blackboard by Feb 25
- Prj 3: detailed design
  - formative evaluation session on Mar 19
    - details later
  - report due on blackboard by Apr 2

all dates on the schedule page

# join a group with same interest

## compatible work habits

- today
  - if not done so, introduce yourself in Piazza
  - browse your colleagues' profiles
  - go to project corners and interview your colleagues
- till Feb 13
  - talk to your colleagues online & offline and form group
- till Feb20
  - get together with your group and discuss *all* projects
  - you will act as users for other projects
    - think of tasks & context